

A portrait of Masato 'Snappy' Katsuda, a man with dark hair and glasses, wearing a blue checkered shirt. The background is dark with a repeating circular pattern. The right side of the image has a white, torn-paper-like edge.

**V-DRUMS
SPECIAL**

THE BIRTH OF THE V-DRUMS

PowerOn catches up with Masato 'Snappy' Katsuda to ask the man responsible for designing the original V-Drums kit the TD-10K about the future of V-Drums. Words: Jordan McLachlan

When Roland launched the TD-20K in 2004, the company raised the bar on electronic drum kit design in dramatic fashion. In terms of sonic ability, editing options, user interface and simple playability there's nothing to touch the flagship V-Drums outfit. Even taking into account Roland's reputation as the world's most innovative electronic percussion manufacturer, the TD-20K represents a remarkable leap forward.

Roland's electronic drum kit offerings have come a long way since the introduction of the TD-7K in 1992. Pads with mesh heads, realistic-feeling cymbals, ever more sophisticated sound modules and now the ground-breaking V-Hi-Hat – improvements in design and ergonomics have come thick and fast.

Behind many of these developments – and indeed the man responsible for the hugely successful original V-Drums kit, the TD-10K – is Masato 'Snappy' Katsuda. Chief Engineer of TD-20K, Snappy-san has a unique perspective on where electronic percussion has come from and where it's likely to go in the future. It was his vision that led to the introduction of V-Hi-Hat last year, the single most exciting development for some time.

So *PowerOn* was pleased to be able to snatch a couple of hours with Snappy (and Hiroyuki Nishi, his Assistant Manager) to talk all things percussion during a recent visit to London.

Tell us a little about the introduction of the TD-20K's new V-Hi-Hat...

We actually had a concept for a full-motion electronic hi-hat at the development stage for the TD-10K. I was the 'producer' of the TD-10 in 1997 and I wanted to introduce the V-Cymbal, the V-Pad with mesh head and the V-Hi-Hat at the same time. I let everyone know of my intention, but they all thought that it would be too difficult to realise the idea of three important new user interfaces all at once.

So while the V-Pad, with the mesh head, was introduced on the TD-10, the other elements were held on the back burner?

There was no alternative at the time. That was why the first V-Drums kit had just the mesh pads. The V-Cymbal came four years later (in 2001) and in 2004 we bought in the V-Hi-Hat.

Something like the V-Hi-Hat is an important feature of the TD-20K. Did it take long to develop?

The production of the V-Hi-Hat took two years (2002 to 2004). Even though we'd had the idea

and a concept for this type of product for five years, we still take a long time to get things right. It's the same with the V-Cymbals. We tried many different methods and materials in the various design stages before we were satisfied that the cymbals would work well with the TD-10 brain. We even experimented with metal cymbals before we decided on the rubberised pad design.

Good design stands the test of time too – the V-Pad concept has been in production for seven years now.

The invention of the V-Pad was significant because it was the first interface for the new TD-10 V-Drum. With the TD-7K in 1992, we

Adding more, **UNIQUE SOUNDS** will be as important to the future of the V-Drums range as **PHYSICAL IMPROVEMENTS** to the user interface aspects – the pads, cymbals and so on

already had the concept of using a mesh head, not rubber for the pad. Our Industrial Mechanical Designer [Mr Yoshino] was not completely satisfied with the rubber pad structure of the TD-7K because it's not realistic for drummers. One day he found a trampoline at a supermarket and he had the idea for a mesh head pad. He realised he could use this type of structure for a pad that would feel more realistic for drummers. We tried so many prototypes at that time but it wasn't quite right, so again we had to carry on working on the pads.

Eventually we were happy with the design and construction of the mesh units, but we didn't have any project that would need the mesh head pad at the time. But when we started to work on the first V-Drums sound module – the first one to use COSM modelling technology from the VG-8

– we realised that we could use Mr Yoshino's trampoline-inspired mesh pads for the new drum kit to go with the kit.

The new TD-20K is such a highly developed product that it's not immediately clear where improvements might come in the future...

Maybe not, but there will be improvement because we never think, "Oh it's okay, we've finished with this product". Even though we released a new product in 2004 with the TD-20K, we will still continue to improve each interface of the drum kit.

Are there any sounds that present particular challenges when it comes to recreating accurate acoustic responses?

The most difficult sounds to model are acoustic snare drums and hi-hats. Bass drum and toms are on the next level of difficulty and cymbals are the easiest. There are so many parameters to take into account with the snare and hi-hat. For example, the hi-hat can be played totally closed, a little bit open or wide open. To model these sounds accurately is hard.

Electronic sounds have also always been a big part of the V-Drums sound...

Yes, and Roland is fortunate to be in a position where we can draw on many classic products for electronic sounds – machines like the TR-808 or TR-909. And in fact these products hold an important lesson for us. The sounds in the 808 and 909 are not recreations of an acoustic sound but unique and have become well-known in their own right. This is important for us in the future, because we want to continue to create new, exciting electronic sounds as we develop new products like the TD-20, just as we did with the TR series. Adding more, unique sounds will be as important to the future of the V-Drums range as physical improvements to the user interface aspects – the pads, cymbals and so on.

Finally, is it possible for you to pick out a single product as a favourite from the Roland electronic percussion back catalogue?

It has to be the TD-10 – I have a very personal relationship with that product because I helped to create it. When I retire from Roland, it will be the TD-10 that I think about. I nearly died from all the hard work needed to come up with the first V-Drums set. I saw the front panel display of the TD-10 brain every day for so long that I will never be able to forget the experience of working on that project. I am very proud to have been part of it.